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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,782	08/11/2000	Donald S. Forsyth	50495-1	9627

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NATIONAL RESEARCH COUNCIL OF CANADA
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EXAMINER

LUDLOW, JAN M

ART UNIT PAPER NUMBER

1743

DATE MAILED: 09/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,782

Applicant(s)

FORSYTH, DONALD S.

Examiner

Jan M. Ludlow

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7-10 and 13-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7-10 and 13-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 29, 2003 has been entered.

2. Claim 15 is objected to because of the following informalities: Claim 15 is identical to claim 13. Appropriate correction is required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.

Ascertaining the differences between the prior art and the claims at issue.

Resolving the level of ordinary skill in the pertinent art.

Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 5, 7-10, 13-22, 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler in view of Murphy.

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6. Koehler teaches a sealed container 60, 61, 62 (see, e.g., col. 4, line 30). In that the instantly disclosed gas tight enclosure means is also a conventional sample bottle with a septum and cap, it is the examiner's position that the sealed container of Koehler constitutes the instant gas tight enclosure. A fiber is fixed to the end of a syringe plunger in a syringe (col. 4, lines 5-30). The fiber is extendable through a syringe needle to sample either liquid or headspace (col. 2, lines 13-23). The fiber materials and coatings include those claimed (col. 4, lines 32-58). Various types of single or multiple fibers can be used (col. 1, lines 10-12). It is the examiner's position that "various types of....multiple fibers" encompasses both multiple fibers that are the same and different, e.g., the same to increase the rate of adsorption (col. 1, line 11 or 12) by increasing the contact area, and different as a meaning of "various". The needle constitutes the instant means for shielding in that they are both metal tubes into which the fiber can be drawn for protection. Desorption is accomplished by inserting the needle in the inlet of an instrument and desorbing.

7. Koehler fails to teach extraction into a microvolume of solvent.

Murphy teaches a device similar to that of Koehler, except that the sorbent is coated on the interior of the needle, not on a fiber within the needle. Desorption can be thermal or chemical, and the chemical desorption is accomplished by drawing only enough solvent to cover the sorbent phase into the needle (col. 2, lines 21-48 and elsewhere), suggesting the instant "microvolume".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the needle of Koehler in a solvent bottle, draw a

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microvolume of solvent into the needle and inject the desorbed analytes into an analyzer as an alternative to thermal desorption of analytes sorbed in a needle carrier as taught by Murphy. It would have been obvious to use a "microvolume" in order to use a very small volume as taught by Murphy. The solvent bottle constitutes the instant "means...for chemically desorbing".

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler and Murphy as applied to claims 1, 5, 7-10, 13-22, 24-32 above, and further in view of Pawliszyn ('206).

9. Koehler fails to teach hollow fibers.

10. Pawliszyn teaches a device similar to that of Koehler. The fiber may be solid or hollow (e.g., Abstract, line 2).

It would have been obvious to use hollow fiber(s) in the device of Koehler in order to use an art-recognized alternative to solid fibers as taught by Pawliszyn.

11. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

The examiner relies on the more explicit statement of Koehler regarding "various types of ...multiple fibers." The examiner notes that "simultaneously fractioning the analytes into various extraction groups, based upon different fiber coating chemistries" (p. 7, paragraph 5 of the response) is not actually claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (703) 308-

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4039. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jan M. Ludlow
Primary Examiner
Art Unit 1743

Jml
September 22, 2003